



# UNITED STATES PATENT AND TRADEMARK OFFICE

17-1A

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,726	08/28/2001	Rafael Storz	016790-0432	2703

22428 7590 05/13/2003

FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

FULLER, RODNEY EVAN

ART UNIT	PAPER NUMBER
----------	--------------

2851

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/939,726

Applicant(s)

STORZ ET AL.

Examiner

Rodney E Fuller

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the phrase "The present invention relates to" can be implied. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following items:

- a. On page 2, line 17, the specification refers to "the features of Patent Claim 1."

However, the claim language may be changed or canceled during the application prosecution.

- b. On page 6, line 24, the specification refers to the "Patent Claim 1." However, the claim language may be changed or canceled during the application prosecution.

Appropriate correction is required.

*Drawings*

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following items must be shown or the feature(s) canceled from the claim(s):

- c. (Claim 1): "the phase angle;"
- d. (Claim 5): "the optical structure," "the casing;"
- e. (Claim 6): "a control element;"
- f. (Claim 8): structure wherein "the modulation means influences the laser light source;"
- g. (Claim 9): structure wherein "the modulation means switches the laser light source on and off;"
- h. (Claim 10): structure wherein "the modulation means influences the pump current of the laser;"
- i. (Claim 11): structure wherein "the modulation means influences the intensity of the laser light source;"
- j. (Claim 12): structure wherein "the modulation means influences the laser resonator or the optical medium of the laser;"
- k. (Claim 13): a "piezo element which moves and/or deforms at least one component of the laser resonator and/or optical medium;"
- l. (Claims 19 and 20): "an AOTF (acousto-optical tunable filter)," an "AOBS (acousto-optical beam splitter);"

No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Objections***

5. Claim 5 recites the limitation "the optical structure" in line 3. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 5 recites the limitation "the casing" in line 3. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 17 recites the limitation "the pixel clock" in lines 2-4. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification (and particularly the "Detailed Description of the Invention" on page 7) does not teach how (Claim 1) the "phase angle of the light field is varied by a modulation means in such a way that

Art Unit: 2851

interference phenomena do not occur in the optical beam path, or occur only to an undetectable extent, within a predeterminable time interval.”

Claims 2-20 depend from claim 1 and therefore include the deficiencies of claim 1.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Maeda, et al.  
(US 6,556,290).

As best the examiner is able to ascertain the claimed invention, Meada discloses all the structure set forth in the claims. On page 2, lines 22-25 of the Summary Of The Invention, the specification states: “*According to the invention, it has been recognized for the first time that disruptive interference phenomena in the optical beam path can be avoided if the coherence length of the light emitted by the laser light source is less than the optical path in the illumination beam path.*” Likewise, Meada discloses (column 9, lines 13-16): “*A method of reducing the spatial coherence will be described. In order to reduce the spatial coherence, it is necessary to acquire light rays that have a longer light-path difference than the coherence length of laser.*”

Art Unit: 2851

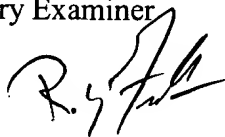
Regarding the claims, Meada discloses "illuminating an object with light from a laser light source (Fig. 1, ref.# 3), preferably in a confocal scanning microscope (column 7, line 11), characterized in that the phase angle of the light field is varied by a modulation means (Fig. 1, ref.# 4) in such a way that interference phenomena do not occur in the optical beam path, or occur only to an undetectable extent, within a predeterminable time interval (column 9, lines 13-16).

*Conclusion*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Fuller whose telephone number is (703) 306-5641. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams, can be reached on (703) 308-2847.

Rodney Fuller  
Primary Examiner



May 9, 2003